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| 09/934,626      | 08/22/2001  | John M. Baron        | 10010923            | 8671             |

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| EXAMINER |
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MISLEH, JUSTIN P

| ART UNIT | PAPER NUMBER |
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2612

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DATE MAILED: 10/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/934,626

Applicant(s)

BARON ET AL.

Examiner

Justin P Misleh

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 15 and 17 - 20 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/22/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claim 17** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

More specifically, Claim 13 comprises a step for “determining whether said memory” and a step for “determining if said memory”; however, Claim 17 simply states, “wherein the determining step”. Claim 17 is vague and indefinite for failing to specify which determining step in Claim 13 it is referring to. For the purposes of examination, the Examiner will interpret Claim 17 to refer to the “determining if said memory step”.

4. **Claim 19** recites the limitation “again downloaded”. There is insufficient antecedent basis for this limitation in the claim. While the specification defines a relationship between an archived image and downloaded image, the claim language does present the same relationship. Parent Claim 13 does not define an archived image as image that has been transferred out the image capturing device or downloaded to an external device; therefore, there is insufficient

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antecedent basis in Claim 19 to state "again downloaded". For the purposes of examination, the Examiner will interpret Claim 19 according to the following language: "wherein an archived image comprises a captured image that has been transferred out of the image capturing device and wherein the archived image may be transferred out of the image capturing device a plurality of times."

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 9, 10, and 12** are rejected under 35 U.S.C. 102(e) as being anticipated by

Kawamura et al.

7. For **Claim 9**, Kawamura et al. disclose, as shown in figures 2, 4, 6, and 7 and as stated in columns 4 (lines 11 – 23 and 63 – 67), 5 (lines 1 – 16 and 31 – 56), 6 (lines 28 – 44), 7 (lines 3 – 29), 8 (lines 30 – 35 and 54 – 62), and 9 (lines 18 – 22), a memory management method for a memory (21) of an image capturing device (11), comprising the steps of:

transferring a copy of an image out of said memory during an image archiving operation (When an image is transferred out of the device, an icon is affixed to the image indicating that it has been transferred; see figure 4 and column 6, lines 51 – 58); and

making said image in said memory (11) as an archived image (After the image is transferred out of the device, it continues to be stored in memory; however, an icon is affixed with the image indicating that it has been transferred out of the device);

wherein said archived image is capable of being replaced if said memory is full (As shown in figure 7, the user has an option to erase the archived image; thereby at least replacing the archived image with free memory space; see column 8, lines 54 – 62).

It is important to note that the above limitation includes the word “capable”. As clearly indicated in figure 7, the image-capturing device is clearly “capable” of replacing archived images at all instances. By the mere fact that image-capturing device is “capable” of replacing archived images, it makes no difference as to when or how it is to be capable of doing so (i.e. It makes no difference if it is capable of being replaced if said memory is full.).

8. As for **Claim 10**, Kawamura et al. discloses, as shown in figure 2, wherein the transferring step comprises transferring said copy to an external computer device (17).

9. As for **Claim 12**, Kawamura et al. discloses, as shown in figure 6 and stated in column 6 (lines 50 – 57), wherein the marking step comprises changing a status variable in an associated status storage cell to an archived state. Kawamura et al. clearly gives every indication that the PC icon (52) is affixed to the image information and stored together in the memory (21).

Therefore, prior to transfer, the image information is stored in a storage cell within the memory until it is retrieved and transferred out of the device, wherein it is affixed with an icon (52) and stored back into the memory, indicating that it has been archived. The storage cell now contains not only just the image but the image with the affixed icon, wherein the image and affixed icon are the “status variable” that have been changed to an archived state.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al.

12. As for **Claim 11**, while Kawamura et al. disclose wherein the transferring step comprises transferring said copy to an external computer device, Kawamura et al. does not disclose wherein the transferring step comprises transferring said copy to a removable memory medium.

**Official Notice** (See MPEP § 2144.03) is taken that both the concepts and advantages of transferring a copy of an image out of an image-capturing device to a removable memory medium are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to transfer a copy of an image out of an image-capturing device to a removable memory medium as a means to provide a backup copy of the image on a portable permanent mass storage device with device interoperable capabilities.

13. **Claims 1 – 8, 13 – 15, and 17 – 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al. in view of Lambert.

14. For **Claim 1**, Kawamura et al. disclose, as shown in figures 2, 4, 6, and 7 and as stated in columns 4 (lines 11 – 23 and 63 – 67), 5 (lines 1 – 16 and 31 – 56), 6 (lines 28 – 44), 7 (lines 3 – 29), 8 (lines 30 – 35 and 54 – 62), and 9 (lines 18 – 22), an image capturing device (11), comprising:

a processor (15);

at least one interface (16) communicating with said processor (15) and capable of transferring images out of said image capturing device (see column 4, lines 12 and 13);

a memory (21) communicating with said processor (15) and capable of storing a plurality of records, with a record including image data ("picture information") and image status data (PC icon 52) indicating whether a copy of the image has been transferred out of the device (The icons are "affixed to" each item of recorded information. See column 5, lines 31 – 33; column 6, lines 51 – 57; and column 8, lines 30 – 35);

wherein said processor (15) determines whether said memory (21) includes any archived images (see step S26 in figure 7 and column 8, lines 54 – 62) as indicated by said status data (PC icon 52) and replaces one or more archived images ("recorded information is erased from the memory card 21") in said memory with a newly captured image ("records the [picture] information in a free storage space in the memory card 21"; see column 4, lines 63 – 67).

According to Kawamura et al., once the images ("recorded information" or "picture information") are transferred (via the interface 16) they are affixed with an icon (PC icon 52) indicating that they have been transferred. The images and associated affixed icons are stored together in the memory card (21). Furthermore, Kawamura et al. discloses a "Transfer Mode" and an "Erase Mode" wherein the images are transferred in the "Transfer Mode" and the images are erased in the "Erase Mode". Lastly, Kawamura et al. states that the camera is provided with an automatic selecting function for automatically selecting recorded images that have been transferred (as indicated by an affixed icon) and erasing those automatically selected recorded images.

However, as stated above, the recorded images that been transferred are erased in the “Erase Mode”; therefore, as required by the claim language, Kawamura et al. does not disclose, “replacing” (“erasing”) the recorded images that have been transferred WHEN insufficient free space exists in said memory to store newly captured images.

On the other hand, Lambert also discloses an image-capturing device comprising a memory for storing archived image data. More specifically, as shown in figures 1 – 3, Lambert teaches an image-capturing device (see figure 1) with a memory (32), wherein a processor (18) replaces one or more images in said memory with a newly captured image WHEN insufficient free space exists in said memory (32) to store newly captured images (see column 5, lines 19 – 26).

As stated in column 1 (lines 29 – 32 and 40 – 43), at the time the invention was made, one with ordinary skill in the art would have been motivated to replace one or more archived images in the memory with a newly captured image when insufficient free space exists in said memory to store newly captured images, as taught by Lambert, in the image capturing device, disclosed by Kawamura et al., as a means to provide an image capturing device that significantly reduces the amount of images to be recorded, while simultaneously ensuring that images of high interest are being stored. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to have replaced one or more archived images in the memory with a newly captured image when insufficient free space exists in said memory to store newly captured images, as taught by Lambert, in the image capturing device, disclosed by Kawamura et al.



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15. As for **Claim 2**, Kawamura et al. disclose, as shown in figure 2 and as stated in column 6 (lines 33 – 44), wherein said at least one interface (16) is a communication interface capable of transmitting a stored image to an external device (17).

16. As for **Claim 3**, Kawamura et al. discloses, as stated in column 9 (lines 18 – 22), wherein said at least one interface (16) is a USB cable interface.

17. As for **Claim 4**, while Kawamura et al. disclose wherein said at least one interface (16) is a communication interface capable of transmitting a stored image to an external device (17), Kawamura et al. does not disclose wherein said at least one interface is a removable memory medium interface capable of transmitting a stored image to a removable memory medium.

**Official Notice** (See MPEP § 2144.03) is taken that both the concepts and advantages of transferring a copy of an image out of an image-capturing device to a removable memory medium are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to transfer a copy of an image out of an image-capturing device to a removable memory medium as a means to provide a backup copy of the image on a portable permanent mass storage device with device interoperable capabilities.

18. As for **Claim 5**, Kawamura et al. disclose wherein said archived image is capable of being replaced if said memory is full (As shown in figure 7, the user has an option to erase the archived image; thereby at least replacing the archived image with free memory space; see column 8, lines 54 – 62).

It is important to note that the above limitation includes the word “capable”. As clearly indicated in figure 7, the image-capturing device is clearly “capable” of replacing archived images at all instances. By the mere fact that image-capturing device is “capable” of replacing

archived images, it makes no difference as to when or how it is to be capable of doing so (i.e. It makes no difference if it is capable of being replaced if said memory is full.).

19. As for **Claim 6**, in regards to the obviousness shown in Claim 1, Lambert also discloses an image-capturing device comprising a memory for storing archived image data. More specifically, as shown in figures 1 – 3, Lambert teaches an image-capturing device (see figure 1) with a memory (32), wherein a processor (18) replaces one or more images in said memory with a newly captured image WHEN insufficient free space exists in said memory (32) to store newly captured images (see column 5, lines 19 – 26). Furthermore, Lambert teaches, as stated in column 5 (lines 19 – 26), overwriting the oldest image with a new image when the memory is full.

However, Lambert does not disclose the method in determining the oldest image.

**Official Notice** (See MPEP § 2144.03) is taken that both the concepts and advantages of determining the oldest image according to stored date/time information associated with each image are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to determine the oldest image according to stored date/time information associated with each image as means to provide insight into the possible significance of each image.

20. As for **Claim 7**, while Kawamura et al. disclose, as shown in figure 2 and as stated in column 4 (lines 20 – 23), wherein said memory (21) comprises a removable memory card, Kawamura et al. do not disclose wherein said memory comprises an internal memory.

**Official Notice** (See MPEP § 2144.03) is taken that both the concepts and advantages of providing an internal memory are well known and expected in the art. At the time the invention

was made, it would have been obvious to one with ordinary skill in the art to provide an internal memory as a means to significantly reduce the likelihood of physical damage to the memory or its contents.

21. As for **Claim 8**, Kawamura et al. disclose, as shown in figure 2 and as stated in column 4 (lines 20 – 23), wherein said memory (21) comprises a removable memory card.

22. For **Claim 13**, Kawamura et al. disclose, as shown in figures 2, 4, 6, and 7 and as stated in columns 4 (lines 11 – 23 and 63 – 67), 5 (lines 1 – 16 and 31 – 56), 6 (lines 28 – 44), 7 (lines 3 – 29), 8 (lines 30 – 35 and 54 – 62), and 9 (lines 18 – 22), a memory management method for a memory (21) of an image capturing device (11), comprising the steps of:

determining whether said memory is capable of storing an additional image (“free storage space”; see column 4, lines 63 – 67);

storing a captured image in said memory if free space exists in said memory (“free storage space”; see column 4, lines 63 – 67);

determining if said memory contains at least one archived image (In the “Erase Mode”, the camera automatically selects recorded images that have been transferred, as indicated by an affixed icon, and erases those automatically selected recorded images; thus, it is determined that the memory contains at least one archived image), and

replacing one or more archived images with said captured image if said memory contains said at least one archived image (The camera “records the [picture] information in a free storage space in the memory card 21”; see column 4, lines 63 – 67. Also see step S26 in figure 7 and column 8, lines 54 – 62).

According to Kawamura et al., once the images (“recorded information” or “picture information”) are transferred out of the camera (via the interface 16) they are affixed with an icon (PC icon 52) indicating that they have been transferred, or archived. The images and associated affixed icons are stored together in the memory card (21). Furthermore, Kawamura et al. discloses a “Transfer Mode” and an “Erase Mode”, wherein the images are transferred in the “Transfer Mode” and the images are erased in the “Erase Mode”. Lastly, Kawamura et al. states that the camera is provided with an automatic selecting function for automatically selecting recorded images that have been transferred (as indicated by an affixed icon) and erasing those automatically selected recorded images.

However, as stated above, the recorded images that been transferred (archived images) are erased in the “Erase Mode”; therefore, as required by the claim language, Kawamura et al. does not disclose, replacing (or “erasing”) one or more archived images with said captured image IF said memory is not capable of storing said captured image.

On the other hand, Lambert also discloses an image-capturing device comprising a memory for storing archived image data. More specifically, as shown in figures 1 – 3, Lambert teaches an image-capturing device (see figure 1) with a memory (32), wherein a processor (18) replaces one or more images in said memory with a newly captured image IF said memory is not capable of storing said captured image (see column 5, lines 19 – 26).

As stated in column 1 (lines 29 – 32 and 40 – 43), at the time the invention was made, one with ordinary skill in the art would have been motivated to replace one or more archived images in the memory with a newly captured image IF said memory is not capable of storing said captured image, as taught by Lambert, in the image capturing device, disclosed by

Kawamura et al., as a means to provide an image capturing device that significantly reduces the amount of images to be recorded, while simultaneously ensuring that images of high interest are being stored. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to have replaced one or more archived images in the memory with a newly captured image IF said memory is not capable of storing said captured image, as taught by Lambert, in the image capturing device, disclosed by Kawamura et al.

23. As for **Claim 14**, Kawamura et al. disclose, as stated in columns 4 (lines 56 – 67) and 5 (lines 1 – 16), wherein the method is performed upon a press of a shutter button (31) of said image capture device.

24. As for **Claim 15**, Kawamura et al. disclose, as stated in column 4 (lines 63 – 67), “free storage space” is not determined until after an image has been captured (see column 4, lines 57 – 63). Therefore, Kawamura et al. disclose wherein the method is performed upon completion of an image capture.

25. As for **Claim 17** (please see 35 U.S.C. 112, second paragraph, rejection above), Kawamura et al. disclose, as stated in column 8 (lines 54 – 62), that the camera is provided with an automatic selecting function for automatically selecting recorded images that have been transferred (as indicated by an affixed icon) and erasing those automatically selected recorded images. Therefore, Kawamura et al. determines if said memory contains archived images by inspecting whether an icon affixed to the image.

26. As for **Claim 18**, as stated in regards to Claim 13, it would have been obvious to one with ordinary skill in the art to have replaced one or more archived images in the memory with a newly captured image IF said memory is not capable of storing said captured image, as taught by

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Lambert. Lambert teaches, as stated in column 5 (lines 19 – 26), overwriting the oldest image with a new image when the memory is full.

27. As for **Claim 19** (please see 35 U.S.C. 112, second paragraph, rejection above), Kawamura et al. disclose, as stated in column 9 (lines 50 – 60), wherein an archived image comprises a captured image that has been transferred out of the image capturing device and wherein the archived image may be transferred out of the image capturing device a plurality of times.

28. As for **Claim 20**, according to Kawamura et al., a replaced archived image is a newly captured image recorded in a “free storage space in the memory card”. Furthermore, Kawamura et al. teach that a status icon (52) is only affixed to an image when the image has been transferred out of the device. Therefore, a replaced archived image is by default in non-archived status and the “changing” corresponds to the “erasing” of the archived image.

***Allowable Subject Matter***

29. **Claim 16** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

30. The following is a statement of reasons for the indication of allowable subject matter:  
The prior art does not teach or fairly suggest wherein an image capture is disabled if said memory full and if said memory does not contain at least one archived image.

***Conclusion***

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following is a brief description of each of the cited prior as labeled on attached form PTO-892.

- **Prior Art C** discloses, in the very least, an electronic camera wherein an image file can be erased and when the image file is erased, a state of notification to the user is changed in accordance with the data attached to an image. Furthermore, the data attached to the image indicates whether or not the image file previously has been transferred from a storing area where the image is stored at present to another storing area.

- **Prior Art D** discloses, in the very least, an image recording device with a first recording medium which stores image data photographed by a digital camera and a second recording medium which has a larger available storage capacity than the first recording medium. When the image data stored in the first recording medium is transferred into the second recording medium, history data corresponding to the image data is also transferred.


- **Prior Art N** discloses, in the very least, a camera concerned with reducing power consumption by transferring images to another device by radio or light waves. The camera is provided with a power supply switch for enabling a transferring operation only when the switch is turned off.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 703.305.8090. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 5:30 PM and on alternating Fridays from 7:30 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wendy R Garber can be reached on 703.305.4929. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM  
October 16, 2004

  
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SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600